HIV MEDICAL CARE SURVEY

An Evaluation of Persons Receiving Care for HIV/AIDS Disease in 2000 Santa Clara County

May 2003

Division of Disease Prevention & Control and Epidemiology & Data Management



ACKNOWLEDGMENT LETTER

The 2000 HIV/AIDS Medical Care Survey is a product of the Division of Disease Control and Prevention and Epidemiology & Data Management of the Santa Clara County Public Health Department. We would like to thank the following people for their work and commitment to this project: Pat Newill, Dr. Sara Cody, Nhien Luong, Brandy Aguirre, Steven Hinsta, Debra Boyd, and Kavita Thirumalai.

We would especially like to thank the physicians caring for HIV-infected individuals, their staff and colleagues for their cooperation and support for this third HIV/AIDS Care Survey. It is our hope that the information contained herein will benefit providers, decision makers, funders, and most all, those living with HIV/AIDS.

Copies of the 2000 survey may be obtained by contacting the Epidemiology & Data Management office at (408) 423-0736.

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Introduction

The HIV Medical Care Survey has been conducted during alternate years by the Santa Clara County Public Health Department, beginning in 1994. This report summarizes results from the fourth HIV Medical Care Survey, which describes the population of HIV-infected persons (both with an AIDS-defining diagnosis and without) who received medical care in Santa Clara County in 2000.

The HIV Medical Care Survey has been a valuable tool to supplement data gathered for the AIDS Case Registry. Because HIV infection was not a reportable condition in California until July 2002, HIV prevalence estimates were hard to measure in Santa Clara County; however, the Medical Care Survey provides information about risk factors, insurance status and co-morbid conditions in HIV-infected persons receiving care in Santa Clara County. We anticipate that this supplemental information will assist community organizations and others to more effectively allocate resources for the HIV-infected population.

Methods

The data collection methods used for the 2000 survey were similar to those used for the surveys in the previous years. We contacted all clinics and individual health care providers who provided care for AIDS patients reported to the AIDS Case Registry during 2000, and requested permission to review charts of all HIV-infected persons in their practice. We collected the following variables for patients in care during 2000: date of birth, gender, race/ethnicity, zipcode of residence, AIDS status, date of AIDS diagnosis, most recent CD4 lymphocyte count, mode of transmission, primary insurance during 1998, co-morbid conditions diagnosed in 2000, provider name, and facility where receiving care. For patients with AIDS, we supplemented the chart review with data collected for the AIDS Case Registry (e.g. for mode of transmission if not recorded in the chart). One case investigator abstracted data from all patient charts included in this survey. Names were not collected. We used a unique identifier composed of a Soundex code, the month and year of birth, and a gender code to identify unique persons and delete duplicate counts. If a duplicate was identified, one record was randomly selected for inclusion in the analyses. We used the 2000 population data from the California Department of Finance to calculate rates.

We estimate that the survey captured the vast majority of HIV-infected patients in care. However, we may have missed some patients if they were recently diagnosed with HIV infection by a physician who does not routinely care for patients with HIV disease, and had not yet been referred to a provider or facility included in the survey.

Key Findings

- In 2000, a total of 1,936 individuals with HIV infection received medical care; 63% of whom carried an AIDS diagnosis. The proportion of AIDS and HIV/Non-AIDS as well as the total number of persons in care in 2000 were nearly identical to those in surveys during1998 and 1996.
- Overall, the majority of AIDS and HIV/Non-AIDS cases were found in whites (58%) and in males (89%). However, the AIDS and HIV/Non-AIDS rates were highest in African-Americans.
- In general, the highest AIDS and HIV/Non-AIDS rates were seen in persons between the ages of 30 and 49. Also, AIDS rates were higher than HIV/Non-AIDS rates in all other age groups except for the 20-29 age group.
- Among males, men having sex with men (MSM) is still at the highest risk for HIV infection followed by injection drug users, 77% and 8% respectively.
- Among females, HIV infection through heterosexual sex contact accounted for 68% of the HIV/AIDS cases followed by injection drug use (22%).
- Overall, 21% of those receiving medical care have no insurance. A higher proportion of HIV/Non-AIDS persons are uninsured (28%) than persons with an AIDS diagnosis (17%).
- Severe mental illness was the most frequently noted co-morbidity among those infected with HIV. About 21% of patients had a diagnosis of Severe Mental Illness (SMI-2) in 2000.

Key Findings (Continued)

• Geographically, residents of Central/Downtown San Jose, and North County accounted for 20% and 18% of patients in care. About 22% were not residents of Santa Clara County.

Some characteristics of populations that are disproportionately affected by HIV/AIDS include:

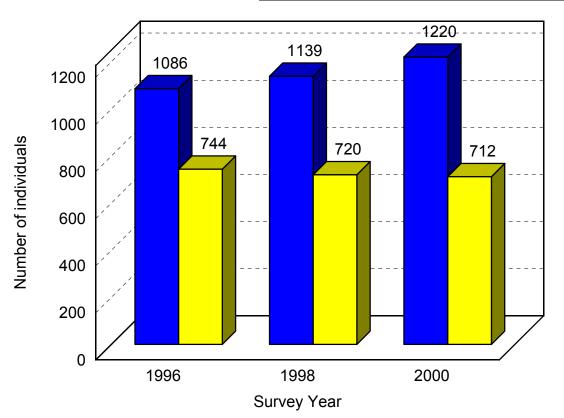
- Men who have sex with men (MSM) represented about 68% of those who were infected with HIV and in care. They were mostly between 30 and 49 years of age (67%), white (67%), and with private insurance (66%) that provided for their care in 2000. The percentage of non-white MSM in care increased by 15% between 1998 and 2000. Among non-white MSM, about 45% had private insurance and 33% were uninsured.
- IDUs made up about 10% of those who were infected and in care. Among the IDUs, 75% were males, 43% were under 40 years of age, close to 34% had a co-morbidity, and almost a fourth were uninsured in 2000.
- Women of childbearing age (15-44 years of age) comprised 9% of those who were infected and in care. White women (46%) followed by African-American women (33%) accounted for the largest percentage of women in care. Heterosexual contact (69%) and Injection drug use (23%) were the predmominant modes of transmission for women between 15 and 44 years of age. About 36% of women reported some co-morbidity and 18% did not have any insurance.

See Glossary for definitions regarding co-morbidity and rate.

Overview

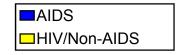
In 2000, 1,936 individuals with HIV infection received medical care in Santa Clara County. The majority of persons in care carried an AIDS diagnosis. The number of persons in care in 2000 for HIV was nearly identical to that found in the earlier years and slightly higher for those with an AIDS diagnosis compared to earlier years.

NUMBER SURVEYED AND HIV/AIDS STATUS

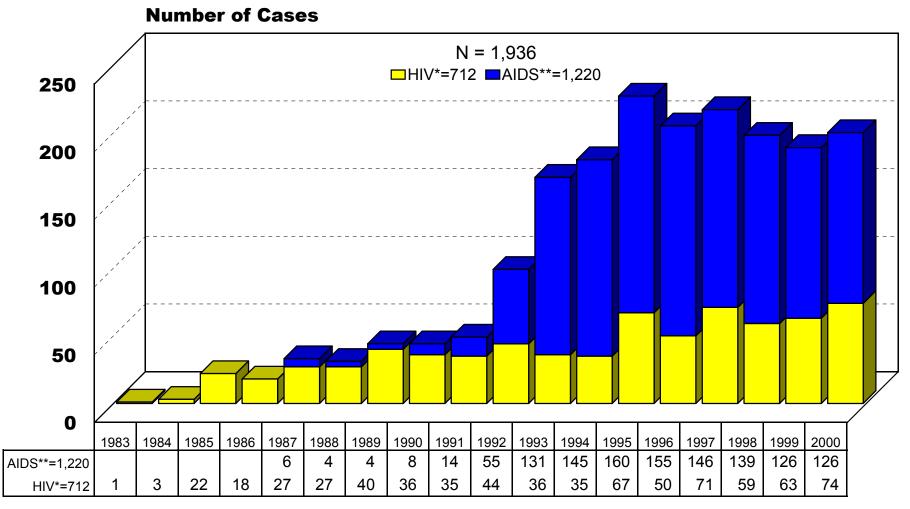


	1996	1998	2000
	N=1,834*	N=1,864*	N=1,936*
AIDS	59%	61%	63%
HIV/Non-AIDS	41%	39%	37%

^{*}Unknown status for 2000 was 4, for 1998 was 5 and 1996 was 4.



HIV/AIDS Cases by Year of Diagnosis Santa Clara County 2000 HIV Medical Care Survey



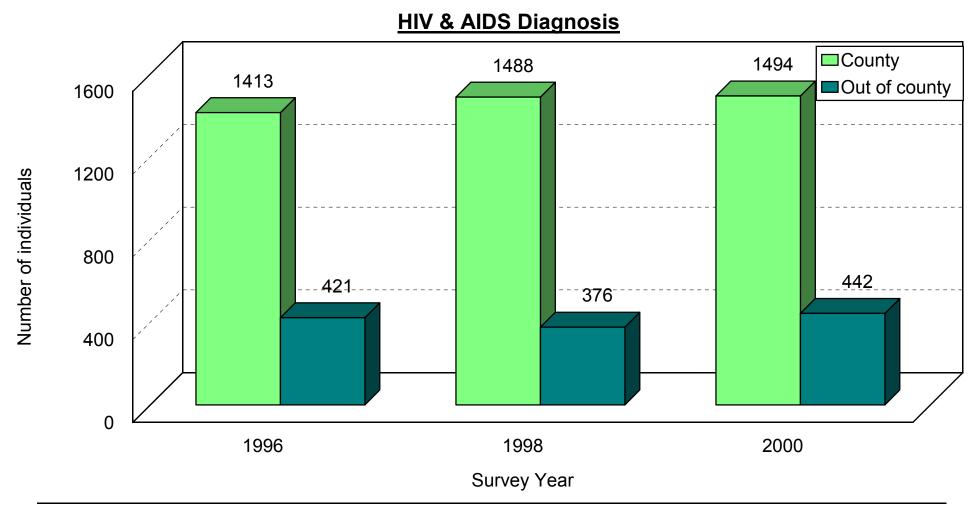
^{**} Some cases (4 in total) are of unknown status

Year of Diagnosis

*Dx year for HIV was as recorded in a chart. This may not reflect the first time HIV+ status was known

Resident Status

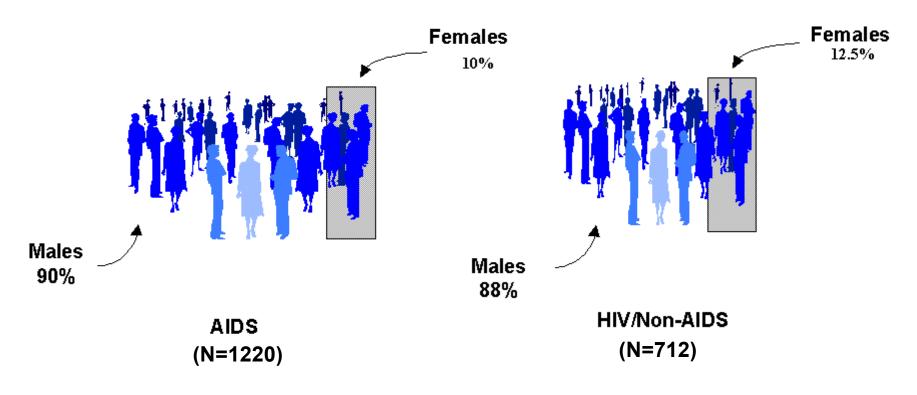
The percentage of patients with HIV infection who received medical care in Santa Clara County but were not residents of Santa Clara County remained similar between the three surveyed years at about 20-23%.



Overview - Gender

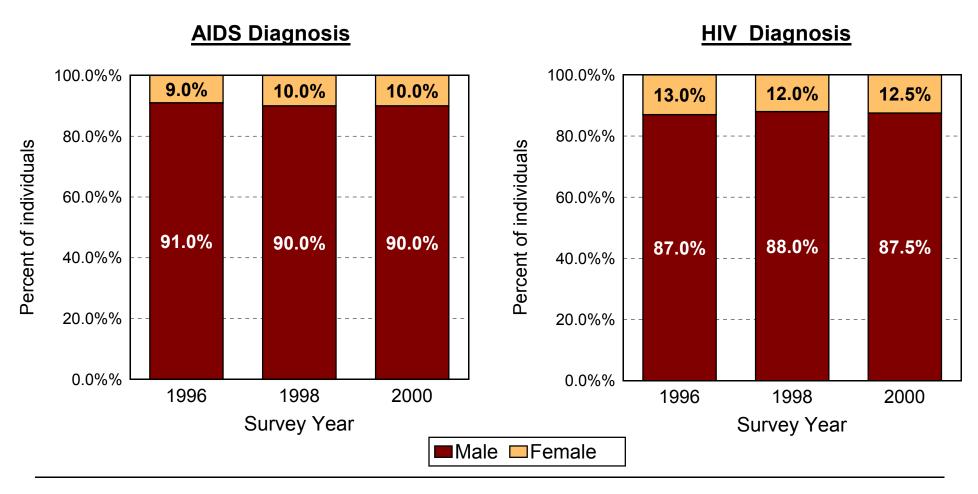
Males accounted for the majority of AIDS and HIV/Non-AIDS cases identified in the survey. This distribution is similar to that seen among HIV and AIDS cases in the previous suveys as well as AIDS cases reported to the AIDS Case Registry.





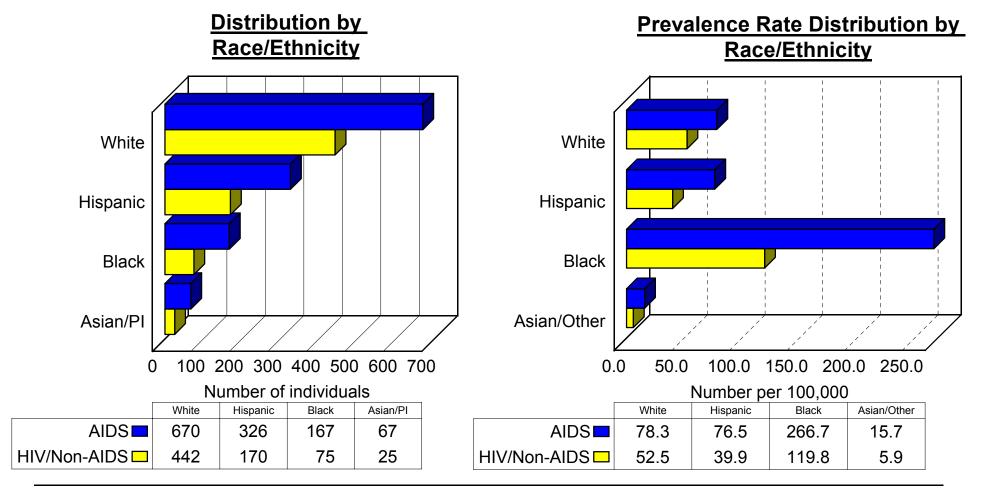
Gender-Trend

The ratio of male to female cases with AIDS or HIV has remained similar over the three years of the surveys. There is a slight difference in the proportion with respect to an AIDS vs HIV diagnosis. A higher proportion of HIV patients in care were females compared to AIDS cases.



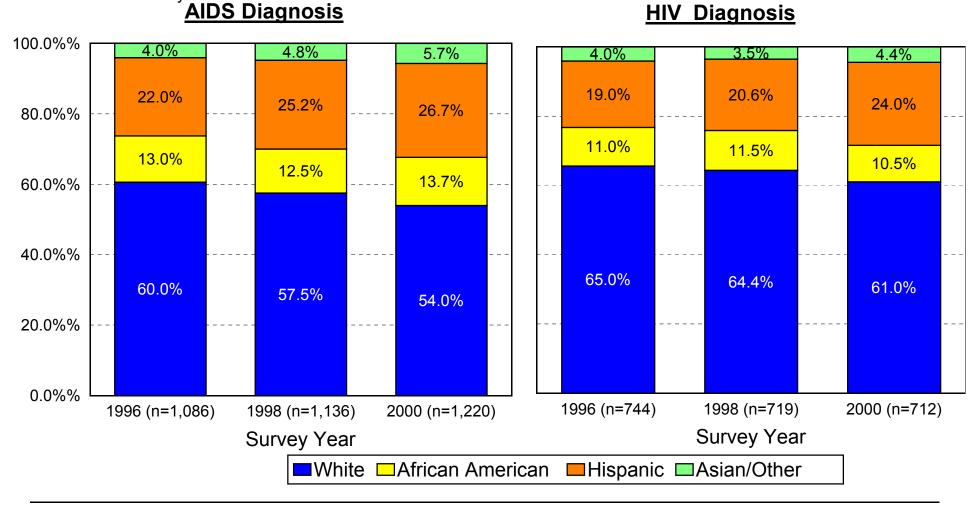
Overview - Race/Ethnicity

Whites accounted for the majority of persons with AIDS and HIV/Non-AIDS in the survey. However, the rate of HIV infection is highest in African Americans.



Race/Ethnic Groups - Trend

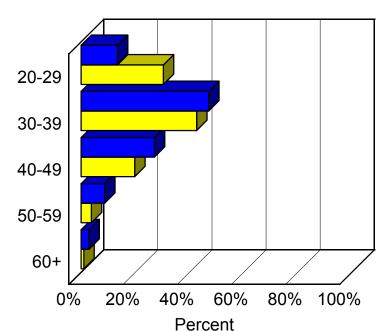
The ethnic distribution of patients with HIV infection who received medical care in Santa Clara County differed based on an AIDS or a HIV diagnosis. A higher percentage of White patients with HIV diagnosis received care. The trends, however, are similar for both HIV and AIDS diagnosis. Between 1996 and 2000, the percentage of non-Whites seeking care increased. This could be a reflection of the increase in diagnosis of non-White AIDS cases in the recent years.



Overview - Age Groups

The percentage of HIV and AIDS cases in care are highest in the 30-39 age group. The next highest for HIV is among the 20-29 year olds and for AIDS is the 40-49 year olds.

Percentage of Persons in Care by Age at Diagnosis



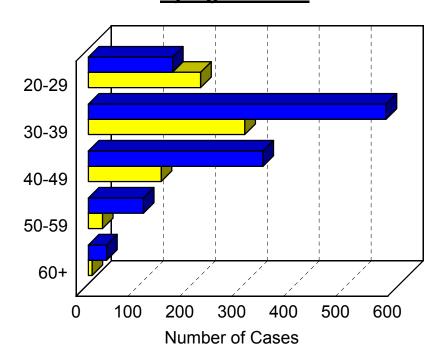
 20-29
 30-39
 40-49
 50-59
 60+

 AIDS
 13.4%
 47.1%
 27.1%
 8.7%
 2.9%

 HIV/Non-AIDS
 30.4%
 42.7%
 19.8%
 3.8%
 1%

Individuals between 30 and 49 years of age for both HIV and AIDS diagnosis made up the majority of individuals receiving care in 2000.

Number of Persons in Care by Age in 2000

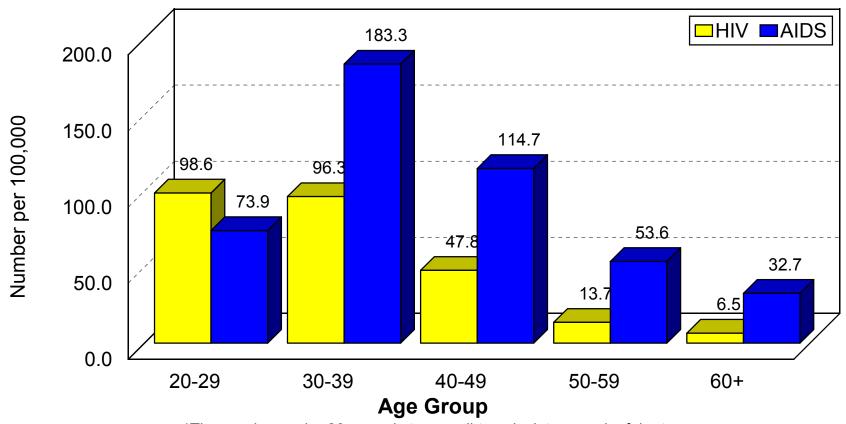


20-29 30-39 40-49 50-59 60+ AIDS = 162 573 336 106 35 HIV/Non-AIDS □ 216 301 140 27 7

Overview- Rates by Age group

The highest rates of AIDS are seen in persons between 30 and 39 years of age and the highest rates of HIV/Non-AIDS are seen in persons between 20 and 29 years of age. The HIV/Non-AIDS rate exceeds the AIDS rate only in those 20 to 29 years old.

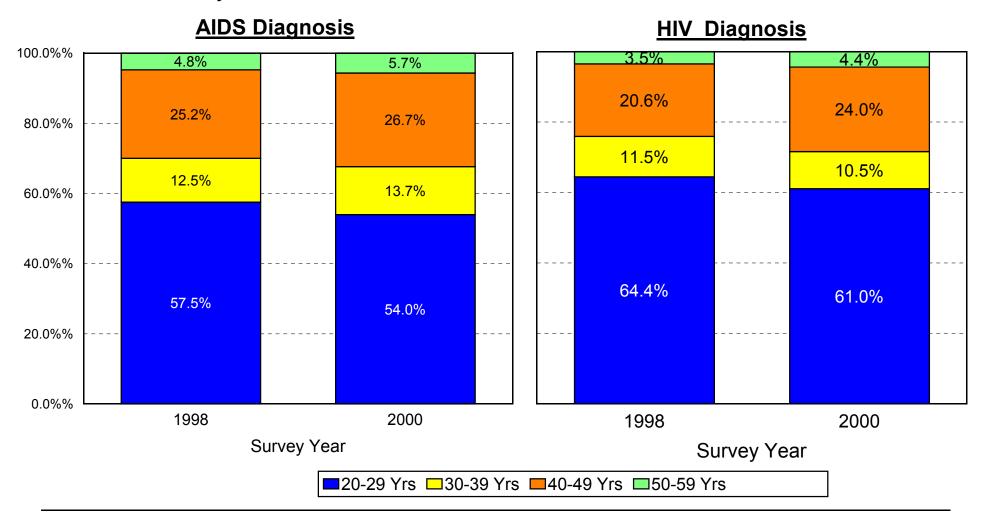
AIDS AND HIV/NON-AIDS RATES BY AGE GROUP



*The number under 20 years is too small to calculate meaningful rates.

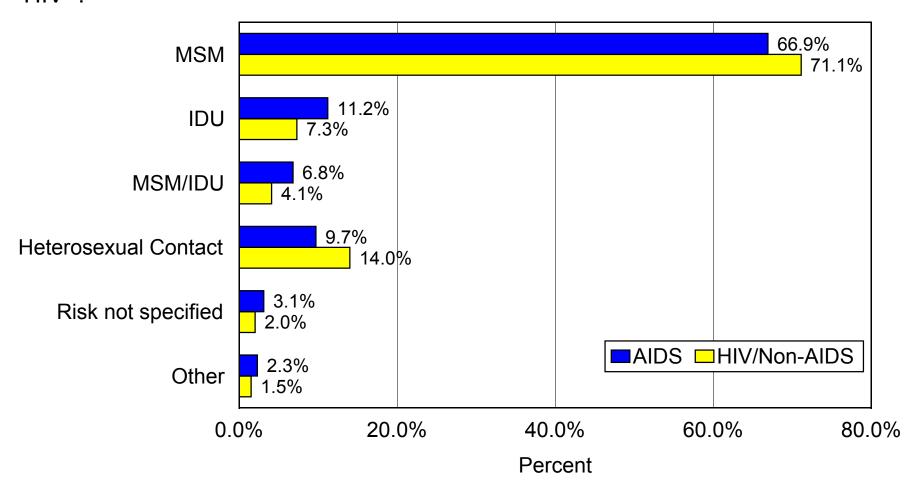
Age Groups - Trend

The percentage of patients with HIV infection who received medical care in Santa Clara County but were not residents of Santa Clara County remained similar across the three years at about 20-23%.



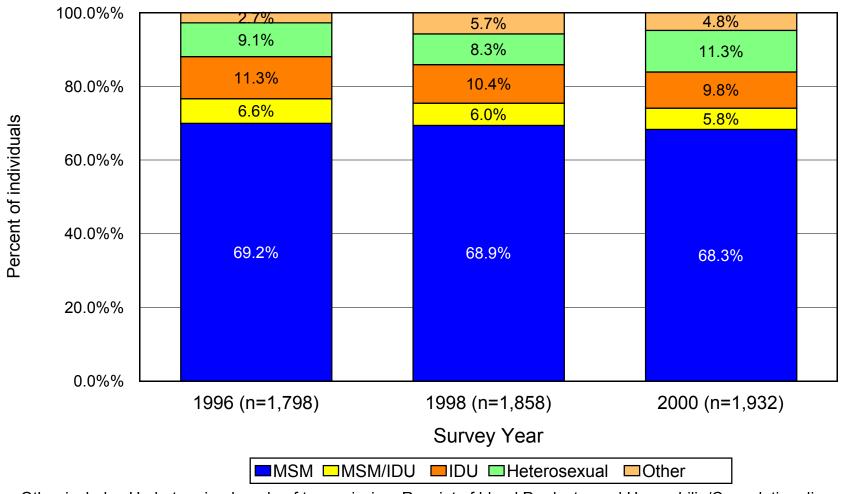
Overview - Mode of Exposure

The highest proportions of individuals with AIDS and HIV/Non-AIDS were among MSM. Heterosexual contact and MSM were slightly higher among those that were HIV+.



Mode of Exposure - Trend

The distribution of the various modes of exposure among HIV patients who received medical care in Santa Clara County was similar over the three years. However, the percentage of infection due to heterosexual contact increased between 1996 and 2000.

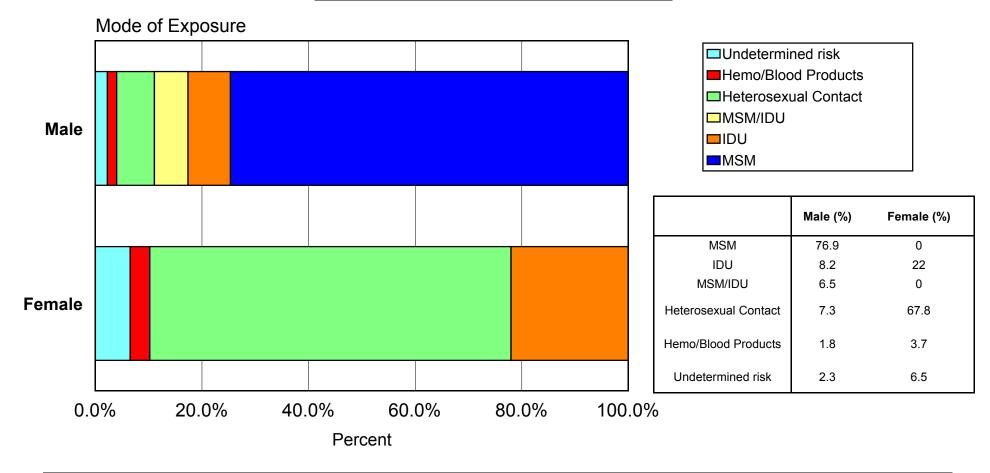


Other includes Undertermined mode of transmission, Receipt of blood Products, and Hemophilia/Coagulation disorder

Mode of Exposure

HIV transmission through heterosexual sex and injection drug use (IDU) accounted for a higher proportion among females than among males.

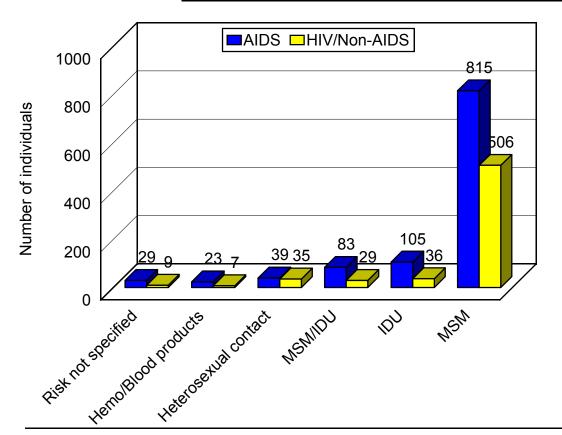
MODE OF EXPOSURE BY GENDER



HIV/AIDS in Males

The primary mode of transmission among males was sexual contact with men (MSM). This was true regardless of HIV/AIDS status. Injection drug use (IDU) was the second most frequent mode of transmission but accounted for a much smaller proportion of cases.

MALES BY HIV/AIDS STATUS AND MODE OF TRANSMISSION

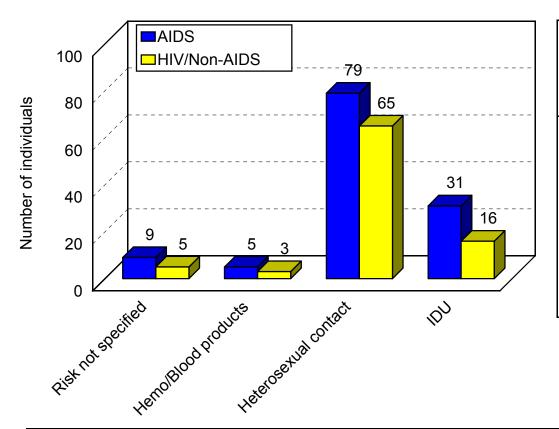


	Percent		
Mode of Transmission	AIDS (n=1094)	HIV/Non-AIDS (n=623)	
Risk not specified	2.7%	1.4%	
Hemo./Blood product	2.1%	1.2%	
Heterosexual contact	3.6%	5.6%	
MSM/IDU	7.6%	4.7%	
IDU	9.6%	5.8%	
MSM	74.5%	81.2%	

HIV/AIDS in Females

Heterosexual contact was the predominant mode of transmission among women, followed by Injection Drug Use (IDU).

FEMALES BY HIV/AIDS STATUS AND MODE OF TRANSMISSION

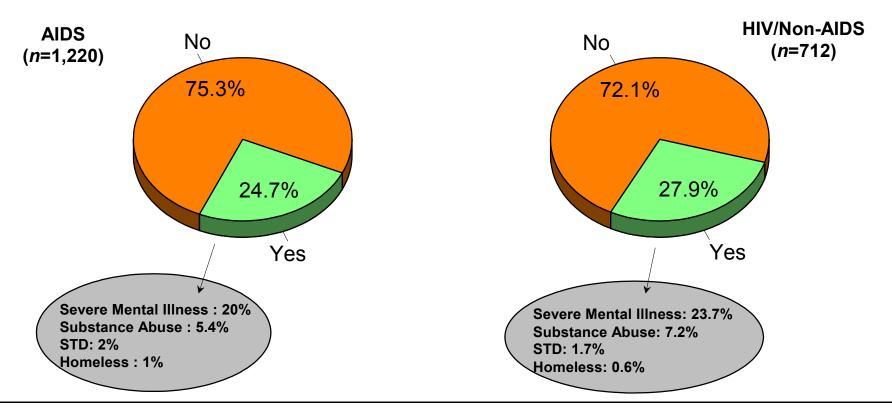


Mode of	Percent			
Transmission	AIDS (n=124)	HIV/Non-AIDS (n=89)		
Risk not specified	7.3%	5.6%		
Hemo./Blood product	4%	3.4%		
Heterosexual contact	63.7%	73%		
IDU	25%	18%		

Co-Morbidities

Co-morbidities were assessed during review of the patient's chart. The co-morbidity must have been present in 2000. Severe mental illness was the most frequently noted co-morbidity. A slightly higher proportion of persons with HIV/Non-AIDS had one of the five co-morbidities as compared to persons with AIDS: 27.9% vs 24.7%. About 2.5% of persons with AIDS and 4.3% of persons with HIV/Non-AIDS had both substance abuse and severe mental illness in 2000.

CO-MORBIDITIES* BY HIV/AIDS STATUS



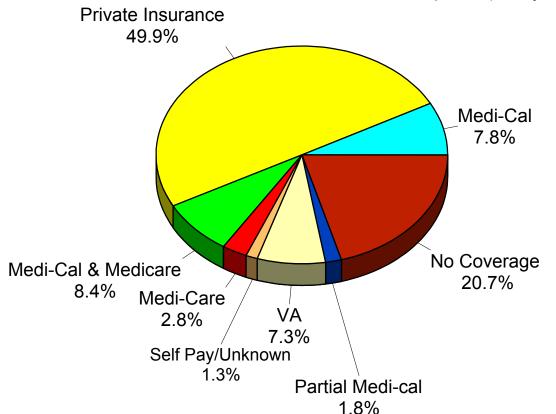
^{*} See Glossary for definition of

Insurance Status

About 50% of those surveyed were covered by private insurance during 2000. Government programs, predominantly the Veteran's Administration, provided coverage for 7% of those in the survey. Medi-Cal covered twice the proportion of AIDS cases compared to HIV/non-AIDS cases. Over one quarter of HIV cases did not have health care coverage.

INSURANCE STATUS

(n = 1,936)



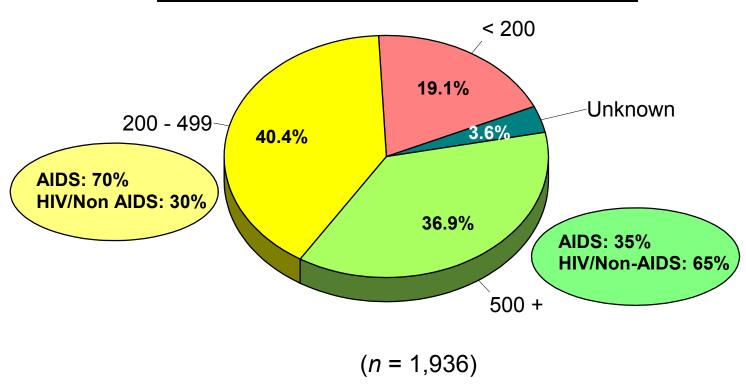
	Percent			
Type of Insurance	AIDS (n=1,220)	HIV/Non-AIDS (n=712)		
Medi-Cal	9.6%	4.5%		
Private Insurance	46.9%	55.1%		
Medi-Cal & Medicare	11.0%	3.4%		
Medi-Care	4.0%	0.7%		
Self Pay/Unknown	2.0%	0.8%		
VA	7.7%	6.7%		
Partial Medi-cal	2.2%	1.0%		
No Coverage	16.6%	27.8%		

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CD4 Counts

Forty percent of those surveyed had CD4 counts between 200 and 499. Of those with CD4 counts over 500, 35% had a diagnosis of AIDS. Additionally, 88% of all those surveyed were on Highly Active Antiretroviral Therapy (HAART). The proportion of patients using HAART was similar in the various categories of CD4 counts.

DISTRIBUTION OF MOST RECENT CD4 COUNT



Distribution of Care by Medical Facilities

Over one-third of those with HIV infection received medical care in the Santa Clara Valley Health and Hospital System. The Positive Care Clinic at Stanford and the Kaiser Medical System accounted for 22% and 18% of those in care, respectively.

DISTRIBUTION OF CARE BY MEDICAL FACILITY

Facility	1996 (n)	1996 (%)	1998 (n)	1998 (%)	2000 (n)	2000(%)
Santa Clara Valley H & HS	657	34	620	32	716	37
Positive Care Clinic	266	14	405	21	429	22
Kaiser	335	17	388	18	356	18
Private Physician	146	8	186	10	106	6
Camino Medical Group	128	7	151	8	128	7
Palo Alto VA	98	5	121	6	141	7
Palo Alto Medical Foundation	20	1	34	2	30	2
Family Health Center	21	1	34	2	28	1
Other	242	13	2	<1	3	<1
Total	1921	100	1907	100	1937	100

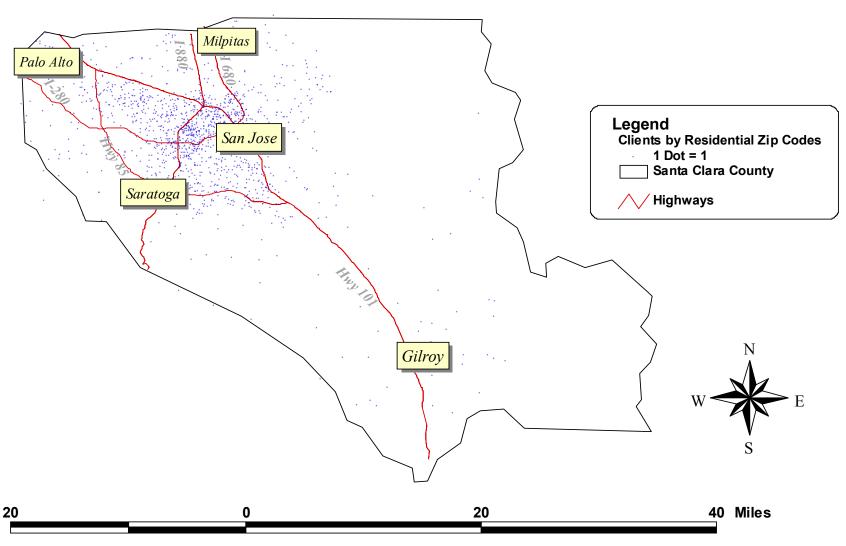
Distribution of Cases by Residence

Public Health Regions 1 and 3, corresponding to the north and central/downtown regions of Santa Clara County, provided residence for the majority of those receiving medical care for HIV infection in Santa Clara County. Non-residents made up 22% of those receiving care in the county.

DISTRIBUTION BY RESIDENCE

Public Health Region	1998 (n)	1998 (%)	2000(n)	2000(%)
1 - (North: Palo Alto, Mountain View, Los Altos, Sunnyvale, Alviso, and Santa Clara)	346	18	342	18
2 - (East: Milpitas, Berryessa and Alum Rock)	205	11	254	13
3 - (Central/Downtown San Jose)	421	23	384	20
4 - (West: Campbell, Cupertino, Monte Sereno, Los Gatos, and Saratoga)	292	16	256	13
5 - (Narvaez)	169	9	214	11
6 - (South: Morgan Hill, San Martin, and Gilroy)	39	2	45	2
Homeless	16	1	21	1
Non-resident/Unknown	380	20	421	22
Total	1868	100	1936	100

Residents of SCC receiving care for HIV infection in SCC in 2000 (n=1454)



Source: Santa Clara County Public Health Department, Epidemiology & Data Management, HIV Medical Care Survey 2000. Note: 2.6% of resident zipcodes were unable to be mapped Created on April 15, 2003 using ArcView GIS 3.2

Special Populations

In order to appropriately target those with greatest needs, it is important to describe those populations that are disproportionately affected by HIV/AIDS and/or underserved by the community.

SPECIAL POPULATIONS

Special Populations	AIDS (n = 1,066)	HIV/Non- AIDS (<i>n</i> = 668)	Total in Care* (<i>n</i> = 1,741)
Men who have sex with men (MSM)	858	532	1393
Injection drug user (IDU)	137	52	189
Women of childbearing age (15-44 years)	93	80	173

^{*} Total in care includes those with unknown AIDS status

Special Populations - MSM

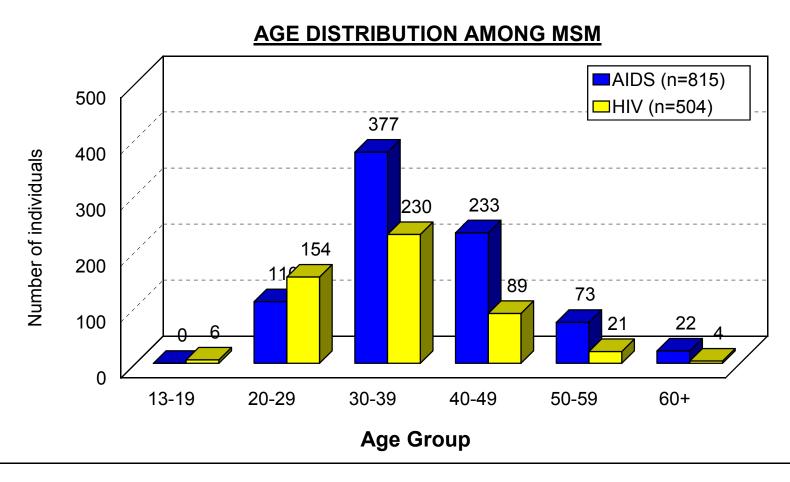
Men who have sex with men account for the majority of cases of HIV and AIDS in care in Santa Clara County. The distribution of the cases among the different ethnic groups has changed between 1998 and 2000, especially with regards to HIV cases among Hispanics.

1998 2000

MSM	AIDS (n = 858, %)	HIV/Non-AIDS (n = 532)	Total in Care* (n = 1,393)	AIDS (n = 816, %)	HIV/Non-AIDS (n = 506, %)	Total in Care* (n = 1,323)
White	515 (60)	371 (69.7)	889 (67.2)	474 (58)	348 (68.8)	823 (62.2)
Hispanic	223 (26)	106 (19.9)	329 (23.6)	224 (27.5)	116 (23.0)	340 (25.7)
African American	73 (8.5)	37 (6.9)	110 (7.9)	66 (8.0)	25 (5.0)	91 (7.0)
Asian/Other	47 (5.5)	18 (3.4)	65 (4.6)	52 (6.3)	17 (3.4)	69 (5.3)

Special Populations - Men who have Sex with Men (MSM)

The majority of MSM patients in both AIDS as well as the HIV/Non-AIDS categories were between 30-39 years of age.

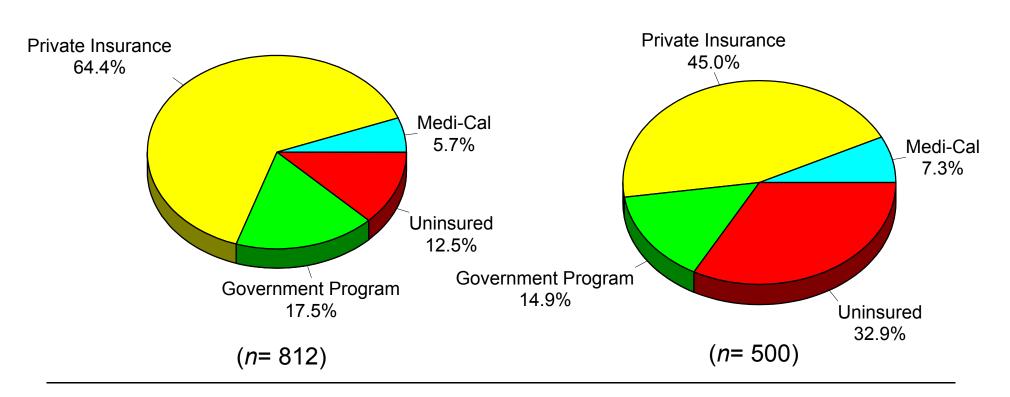


Special Populations - Men who have Sex with Men (MSM)

Only 45% of non-White MSM were covered by private insurance compared to 64% of White MSM. Similarly, 33% of non-White MSM were uninsured compared to 12.5% of White MSM.

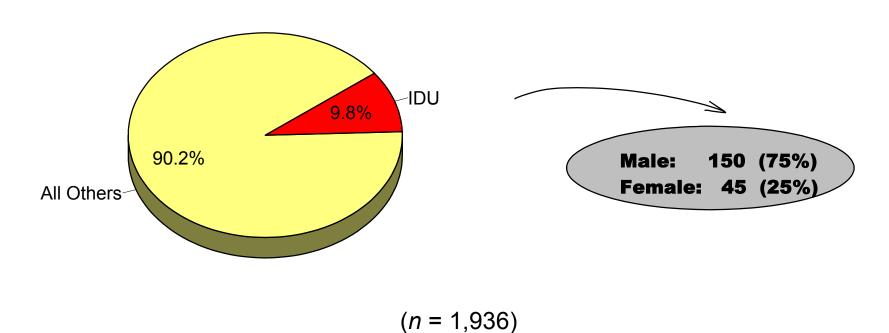
INSURANCE STATUS AMONG WHITE MSM

INSURANCE STATUS AMONG NON-WHITE MSM



IDUs made up 9.8% of the total number of HIV infected individuals receiving medical care in Santa Clara County. Seventy two percent (72%) of these individuals have AIDS. Among the IDUs, there are three times as many males as females.

INJECTION DRUG USERS BY GENDER



Special Populations - Injection Drug Users - Trend and Ethnicity

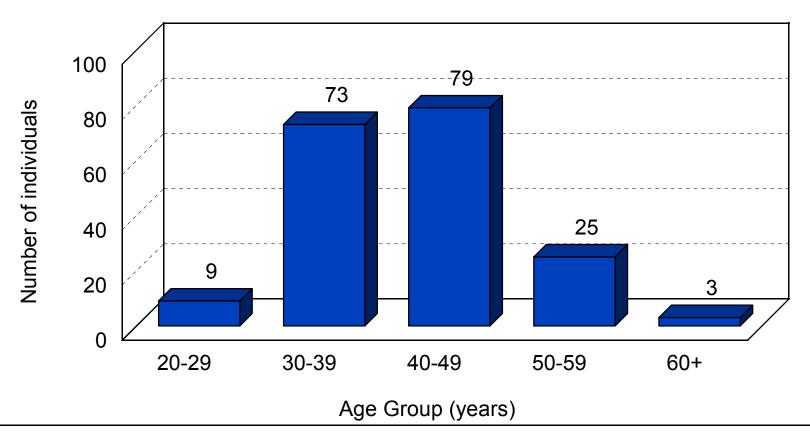
Injection Drug Use is the second most frequent mode of transmission among the survey patients in Santa Clara County. The distribution of the cases among the different ethnic groups has changed between 1998 and 2000, especially with regards to an increase among Hispanics.

1998 2000

IDU	AIDS (n = 126, %)	HIV/Non-AIDS (n = 67)	Total in Care* (n = 194)	AIDS (n = 137, %)	HIV/Non-AIDS (n = 52, %)	Total in Care* (n = 189)
White	54 (42.9)	34 (50.7)	89 (45.9)	53 (37)	25 (48)	78 (41)
Hispanic	28 (22.2)	10 (14.9)	38 (19.6)	38 (27.7)	7 (13.5)	45 (23.8)
African American	41 (32.5)	22 (32.8)	63 (32.5)	44 (32.0)	17 (32.6)	61 (32.2)
Asian/Other	3 (2.4)	1 (1.5)	4 (2.0)	2 (1.4)	3 (5.2)	5 (2.6)

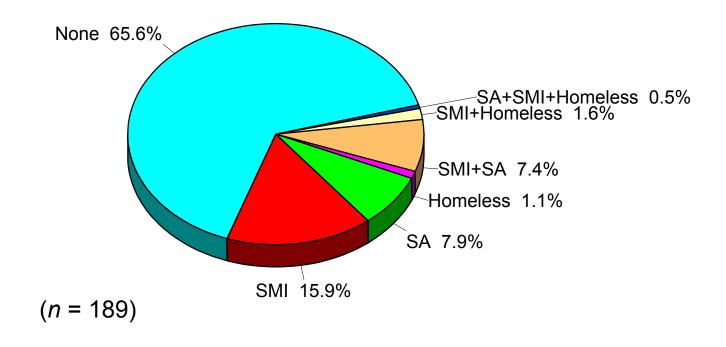
The majority of IDUs were between 40-49 years of age. Forty three percent (43%) of injection drug users were under the age of 40.

AGE DISTRIBUTION AMONG INJECTION DRUG USERS



IDU's were more likely to have one of five co-morbidities when compared to other special populations. Substance abuse and severe mental illness occurred most frequently among IDUs.

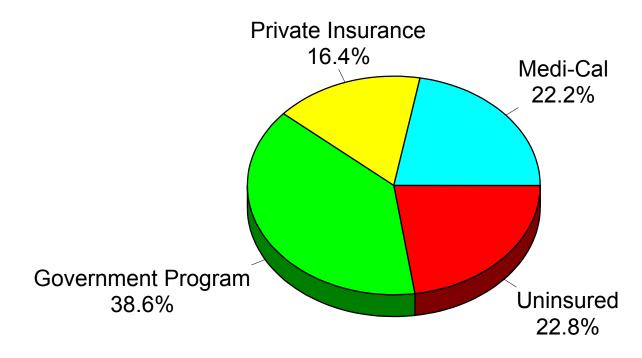
CO-MORBIDITIES* AMONG INJECTION DRUG USERS



^{*}See Glossary for definition of co-morbidities

About 16% of IDUs had private insurance. Thirty eight percent (38%) of IDUs were covered by government programs as compared to 6% of the total persons surveyed.

INSURANCE STATUS AMONG INJECTION DRUG USERS



$$(n = 189)$$

Women of childbearing age (15-44 years) comprised 9% of all individuals infected with HIV receiving medical care in Santa Clara County. Fifty six (56%) of these women have AIDS. White women accounted for the largest proportion of women of childbearing age with HIV/AIDS, followed by African American women.

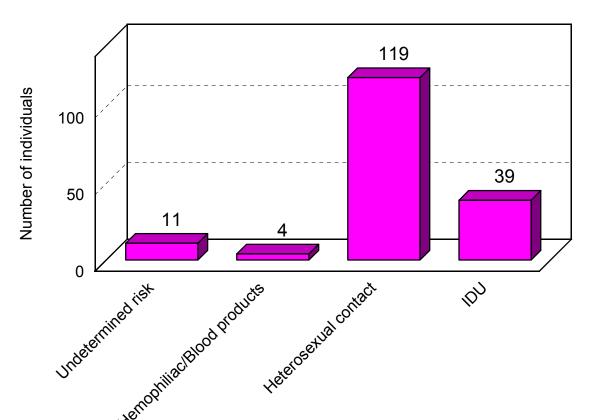
RACIAL DISTRIBUTION AMONG WOMEN OF CHILD BEARING AGE

1998 2000

Women 15-44 years	AIDS (n = 126, %)	HIV/Non-AIDS (n = 67)	Total in Care* (n = 194)	AIDS (n = 97, %)	HIV/Non-AIDS (n = 80, %)	Total in Care* (n = 173)
White	54 (42.9)	34 (50.7)	89 (45.9)	41 (42.3%)	33 (41.3)	75 (42.1)
Hispanic	28 (22.2)	10 (14.9)	38 (19.6)	24 (24.7)	20 (25)	44 (24.7)
African American	41 (32.5)	22 (32.8)	63 (32.5)	29 (30)	17 (21.3)	46 (25.8)
Asian/Other	3 (2.4)	1 (1.5)	4 (2.0)	3 (3.1)	10 (12.6)	13 (7.3)

Heterosexual contact and injection drug use (IDU) are the most common modes of transmission among women of childbearing age.

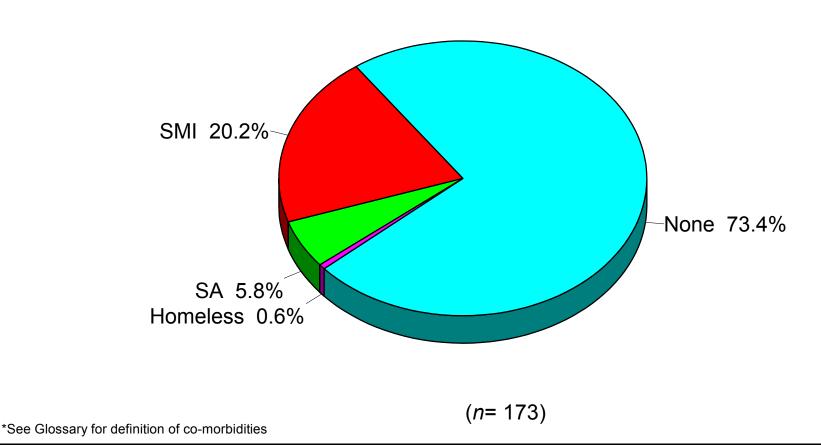
MODE OF TRANSMISSION AMONG WOMEN OF CHILDBEARING AGE



Mode of Transmission	Percent with risk (n=173)
Risk not specified	6.4%
Hemophiliac/Blood product	2.3%
Heterosexual contact	68.8%
IDU	22.5%

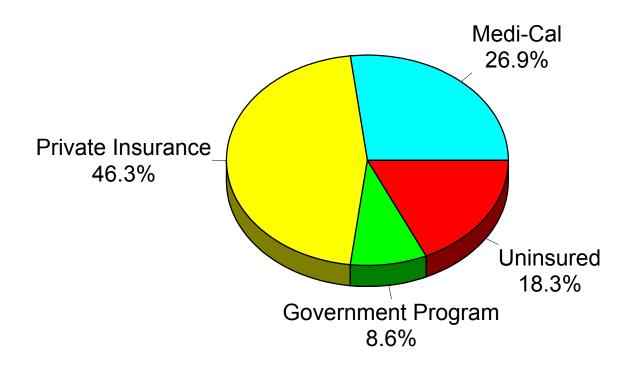
Nearly one-fifth of the women of childbearing age were diagnosed with severe mental illness (SMI) making this the most common co-morbidity in this population.

CO-MORBIDITIES* AMONG WOMEN OF CHILDBEARING AGE



Eighteen percent (18%) of women of childbearing age had no health care insurance as compared to 21% of the total persons in the survey. Almost 27% of women had Medi-Cal as their primary insurance.

INSURANCE STATUS AMONG WOMEN OF CHILDBEARING AGE



$$(n=173)$$

Appendix - Glossary

Co-Morbidities: defined as having substance abuse, severe mental illness, homelessness, tuberculosis, or a sexually transmitted disease diagnosis.

Homeless - most recent address listed as "none" or as a homeless shelter.

Severe Mental Illness - received any treatment or medication for depression or other mental illnesses in 2000.

Sexually Transmitted Disease (STD) - received a STD diagnosis or any treatment for a STD in 2000.

Substance Abuse - use of alcohol, marijuana, speed, heroin, cocaine, methamphetamines or other non-prescription drugs in 2000.

Rate: measures the occurrence of an event in a population over time. In other words, it relates the number of cases to the size of the population or the group where the cases occurred.

Risk not specified: Includes persons for whom risk information is incomplete (due to death, refusal to acknowledge, or loss to follow up) and cases still under investigation.

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